

Amendments to the claims:

Please replace all prior versions and listings of the claims with the following amended claims:

1. (currently amended) A testing system comprising:
 - a. a handling system for automatically loading and positioning within a given tolerance each of a plurality of laser diode sub-assemblies, the handling system comprising:
 - i. a loading device for automatically loading and unloading each of the laser diode sub-assemblies into and out of one of one or more collets; and
 - ii. a carousel including one or more more nests, each nest for supporting one of the one or more collets, wherein the carousel moves each collet from a loading position, to one or more testing positions, and to an unloading position;
 - b. an optical system for automatically receiving each laser diode subassembly from the handling system and automatically performing one or more tests to measure functionality of each laser diode sub-assembly;
 - c. a detection system for detecting characteristics associated with one or more tests performed by the optical system for each laser diode sub-assembly; and
 - d. a control system for automatically receiving detected characteristics from the detection system, comparing the detected characteristics to stored expected characteristics for a properly functioning laser diode sub-assembly thereby forming a comparison, and providing control instructions to the optical system based on the comparison.
2. (canceled).
3. (canceled).
4. (canceled).
5. (canceled).

6. (canceled).

7. (canceled).

8. (canceled).

9. (canceled).

10. (canceled).

1 11. (currently amended) The testing system according to Claim ~~10~~ 1 wherein each collet
2 supported by the carousel is thermally conditioned by a thermo-electronic controller to
3 within a first thermal tolerance.

1 12. (original) The testing system according to Claim 11 wherein the optical system
2 automatically secures the collet into a specified position by actuating a thermal
3 conditioning apparatus against a bottom surface of the collet.

1 13. (original) The testing system according to Claim 11 wherein the collet, once moved
2 to one of one or more testing positions, is automatically removed from the carousel and
3 loaded into the optical system by the handling system.

14. (canceled).

15. (canceled).

16. (canceled).

1 17. (currently amended) The testing system according to Claim ~~10~~ 1 wherein the carousel
2 incrementally rotates through a plurality of positions, wherein the loading position and
3 the one or more testing positions are included within the plurality of positions, further

4 wherein the handling system uses sensors to monitor that the carousel accurately
5 increments from one position to the next.

1 18. (original) The testing system according to Claim 17 wherein the sensors also
2 monitor that the laser diode sub-assembly is positioned within the collet within the given
3 tolerance.

19. (canceled).

20. (canceled).

21. (canceled).

22. (canceled).

23. (canceled).

24. (canceled).

25. (canceled).

26. (canceled).

1 27. (currently amended) ~~An apparatus for securing, locating, electrically and thermally~~
2 ~~contacting a device under test comprising:~~ The testing system according to Claim 1
3 wherein each collet comprises:

- 4 a. a block of thermally conductive material;
- 5 b. a channel extending vertically through the block and extending horizontally from
6 a front surface of the block towards a back surface of the block without reaching
7 the back surface; and
- 8 c. a positioning hole extending vertically through the block and intersecting the
9 channel, wherein the positioning hole includes a top portion with a width larger
10 than a width of a bottom portion of the positioning hole, further wherein the top

11 portion is sufficiently long as to position the device under test within the
12 positioning hole such that a bottom surface of the device under test rests at a top
13 of the bottom portion of the positioning hole and a top surface of the device under
14 test rests above a top surface of the block,
15 wherein the channel is widened from a standard configuration to an extended
16 configuration by applying a prying means to the channel, and the channel returns to the standard
17 configuration from the extended configuration upon removing the prying means from the
18 channel.

1 28. (currently amended) The ~~apparatus~~ testing system according to Claim 27 wherein the
2 block is made of beryllium copper.

1 29. (currently amended) The ~~apparatus~~ testing system according to Claim 28 wherein the
2 channel includes a wedge-shaped opening at the front surface of the block.

1 30. (currently amended) The ~~apparatus~~ testing system according to Claim 29 wherein a
2 cross-section of the top portion of the positioning hole matches a cross-section of the
3 device under test.

1 31. (currently amended) The ~~apparatus~~ testing system according to Claim 30 wherein the
2 prying means is a wedge and the channel is widened to the extended configuration by
3 pressing the wedge into the wedge-shaped opening of the channel.

1 32. (currently amended) The ~~apparatus~~ testing system according to Claim 31 wherein the
2 width of the top portion of the positioning hole is larger than a width of the channel and
3 equal to a width of the device under test.

1 33. (currently amended) The ~~apparatus~~ testing system according to Claim 32 wherein the
2 cross-section of the top portion of the positioning hole and the device under test is
3 circular.

- 1 34. (currently amended) ~~An apparatus for securing a device under test comprising:~~ The
2 testing system according to Claim 1 wherein each collet comprises:
3 a. a beryllium copper block;
4 b. a channel horizontally bisecting the block such that the channel extends vertically
5 from a top surface of the block through a bottom surface of the block, and the
6 channel extends horizontally from a front surface of the block past a center of the
7 block but not as far as a back surface of the block, wherein the channel includes a
8 wedge-shaped opening at the front surface of the block; and
9 c. a positioning hole extending from a top center of the top surface of the block to a
10 bottom center of the bottom surface of the block and intersecting the channel,
11 wherein a cross-section of the positioning hole matches a cross-section of the
12 device under test, further wherein the positioning hole includes a top portion with
13 a width larger than a width of the channel and equal to a width of the device under
14 test, and a bottom portion with a width less than the width of the device under
15 test, further wherein the top portion is sufficiently long as to position the device
16 under test within the positioning hole such that a bottom surface of the device
17 under test rests at a top of the bottom portion of the positioning hole and a top
18 surface of the device under test rests above the top surface of the block,
19 wherein the width of the channel is widened from a standard width to an extended width
20 by pressing a wedge into the wedge-shaped opening of the channel and the width of the channel
21 returns to the standard width when the wedge is removed from the wedge-shaped opening.
- 1 35. (currently amended) ~~The apparatus~~ testing system according to Claim 34 wherein the
2 device under test is a laser diode sub-assembly.
- 1 36. (currently amended) ~~The apparatus~~ testing system according to Claim 35 wherein the
cross-section of the positioning hole and the laser diode sub-assembly is circular.